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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/542,199	VILLARET, YVES	
	<b>Examiner</b>	<b>Art Unit</b>	
	Patrick J. Lee	2878	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 9/17/2007.
2. ☒ The allowed claim(s) is/are 1-22 and 29-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

- Attachment(s)**
- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Daniel Swirsky on October 24, 2007.

The application has been amended as follows:

Claim 10. (Currently Amended) An optical encoder assembly for indicating the angular position of a rotary shaft, comprising the following elements having a common symmetry axis:

- a. a rotary shaft;
- b. a rotating optical disk centrally attached to the said rotary shaft and perpendicularly inclined relative to the said rotary shaft, the said rotating optical disk having a pattern of alternating light absorbing and transparent surfaces;
- c. at least one optical guide means having a hollow inner space, a transparent peripheral wall configured to confine light rays within itself, and a terminal peripheral rim facing a front side of the said rotating optical disk for emitting light rays in the direction of the said optical disk and receiving light rays from the direction of the said optical disk; and

d. a mirror patterned in a predetermined pattern and disposed behind the said optical disk distally to the said optical guide means and inclined in parallel to the said rotating optical disk such that a reflective face of the said mirror is facing a back side of the said rotating optical disk.

Claim 15. (Currently Amended) An optical encoder assembly for indicating the angular position of a rotary shaft according to claim 10 wherein the said mirror is a static mirror with and the said predetermined pattern is a pattern of reflective and absorbent sections.

Claim 16. (Currently Amended) An optical encoder assembly for indicating the angular position of a rotary shaft according to claim 10 wherein the said predetermined pattern of said mirror ~~has~~ is a circular pattern of reflective and absorbent sections that is disposed at the same geometrical position as the circular pattern of transparent and absorbent section son the optical disk.

Claim 17. (Currently Amended) An optical encoder assembly for indicating the angular position of a rotary shaft according to claim 10 wherein the said predetermined pattern of said mirror has comprises two concentric circular patterns being disposed at the same geometrical positions as the two concentric circular patterns of transparent and absorbent sections on the optical disk.

Claim 29. (Currently Amended) An optical encoder assembly for indicating the angular position of a rotary shaft according to claim 11 wherein the said mirror is a static mirror and the said predetermined pattern with is a pattern of reflective and absorbent sections.

Claim 30. (Currently Amended) An optical encoder assembly for indicating the angular position of a rotary shaft according to claim 12 wherein the said mirror is a static mirror with and the said predetermined pattern is a pattern of reflective and absorbent sections.

Claim 31. (Currently Amended) An optical encoder assembly for indicating the angular position of a rotary shaft according to claim 13 wherein the said mirror is a static mirror with and the said predetermined pattern is a pattern of reflective and absorbent sections.

Claim 32. (Currently Amended) An optical encoder assembly for indicating the angular position of a rotary shaft according to claim 14 wherein the said mirror is a static mirror with and the said predetermined pattern is a pattern of reflective and absorbent sections.

***Reasons for Allowance***

2. Claims 1-22 & 29-39 are allowable over the prior art.

3. The following is an examiner's statement of reasons for allowance:

With respect to claims 1 and 10, the prior art of record does not disclose nor suggest a mirror patterned in a predetermined pattern disclosed behind the optical disk. As a result, claims 1 & 10 and dependent claims 2-9, 11-22, & 29-39 are allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


#### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Lee whose telephone number is (571) 272-2440. The examiner can normally be reached on Monday through Friday, 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2878

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
PJL  
October 24, 2007

Patrick J. Lee  
Examiner  
Art Unit 2878